

United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/016,277	11/02/2001	Peter Hsiuen Wu	38190/201827	3510	
826	7590 06/02/2004		EXAMINER		
ALSTON &	ALSTON & BIRD LLP			RUGGLES, JOHN S	
	BANK OF AMERICA PLAZA 101 SOUTH TRYON STREET, SUITE 4000			PAPER NUMBER	
	CHARLOTTE, NC 28280-4000		1756		

DATE MAILED: 06/02/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)
Advisory Action	10/016,277	WU, PETER HSIUEN
, and y	Examiner	Art Unit
	John Ruggles	1756
The MAILING DATE of this communication appe	ears on the cover sheet with the c	orrespondence address
THE REPLY FILED 30 April 2004 FAILS TO PLACE TH Therefore, further action by the applicant is required to a Final rejection under 37 CFR 1.113 may only be either: (1 condition for allowance; (2) a timely filed Notice of Appea Examination (RCE) in compliance with 37 CFR 1.114.	void abandonment of this applica) a timely filed amendment whicl	ition. A proper reply to a
PERIOD FOR RE	EPLY [check either a) or b)]	
a) The period for reply expires 3 months from the mailing dat b) The period for reply expires on: (1) the mailing date of this no event, however, will the statutory period for reply expire ONLY CHECK THIS BOX WHEN THE FIRST REPLY WAS 706.07(f). Extensions of time may be obtained under 37 CFR 1.136(a). The fee have been filed is the date for purposes of determining the period fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of (2) as set forth in (b) above, if checked. Any reply received by the Offiled, may reduce any earned patent term adjustment. See 37 CFR 1.	Advisory Action, or (2) the date set forth later than SIX MONTHS from the mailin S FILED WITHIN TWO MONTHS OF THe date on which the petition under 37 CF of extension and the corresponding amount the shortened statutory period for reply ice later than three months after the mail	g date of the final rejection. IE FINAL REJECTION. See MPEP R 1.136(a) and the appropriate extension unt of the fee. The appropriate extension originally set in the final Office action; or
 A Notice of Appeal was filed on <u>30 April 2004</u>. App 37 CFR 1.192(a), or any extension thereof (37 CF 	ellant's Brief must be filed within	
2. The proposed amendment(s) will not be entered b	ecause:	
(a) they raise new issues that would require furth	er consideration and/or search (see NOTE below);
(b) they raise the issue of new matter (see Note	pelow);	
(c) they are not deemed to place the application issues for appeal; and/or	in better form for appeal by mate	rially reducing or simplifying the
(d) they present additional claims without cancel NOTE:	ing a corresponding number of f	inally rejected claims.
3. Applicant's reply has overcome the following rejection	tion(s):	
4. Newly proposed or amended claim(s) would canceling the non-allowable claim(s).	I be allowable if submitted in a se	eparate, timely filed amendment
5. ☐ The a) ☐ affidavit, b) ☐ exhibit, or c) ☐ request for application in condition for allowance because: See		idered but does NOT place the
6. The affidavit or exhibit will NOT be considered bed raised by the Examiner in the final rejection.	cause it is not directed SOLELY	to issues which were newly
7. For purposes of Appeal, the proposed amendmen explanation of how the new or amended claims w		
The status of the claim(s) is (or will be) as follows:		
Claim(s) allowed:		
Claim(s) objected to:		
Claim(s) rejected: 1-49.		
Claim(s) withdrawn from consideration:		
8. The drawing correction filed on is a) app	proved or b) disapproved by	the Examiner.
9. Note the attached Information Disclosure Stateme	nt(s)(PTO-1449) Paper No(s).	<u>.</u> ,
10. Other:		1 Regle

John Ruggles Examiner Art Unit 1756

Continuation of 5. does NOT place the application in condition for allowance because: Applicant's further arguments are still not convincing. As stated previously, Sokol and Maeda were combined because they both relate to radiation curable acrylate coating compositions. Maeda teaches use of a polymerizable acrylate peelable maskant composition having either an inorganic or an organic polymerization initiator (column 4, lines 9-16), which can also include a cross-linking type acrylate thickener (column 5, lines 64-66). Thus, Maeda clearly shows the suitability of using a radiation curable acrylate coating composition as a peelable maskant suitable to withstand the subsequent etching of an underlying metal substrate. Maeda also teaches the heating or curing of this acrylate coating composition (e.g., by far infrared (IR) radiation, etc.) after it has been deposited (column 7, lines 44-46), as was previously pointed out. Even though the Maeda polymerizable acrylate coating composition was cured by heat and/or IR (rather than by actinic (UV) radiation, as in the instant case), the Maeda acrylate coating composition is still radiation curable, in order to form a suitably peelable maskant that stands up to subsequent etching of a metal substrate. While Maeda is silent as to whether further cross-linking of the acrylate polymer coating occurs during the final heating and/or IR exposure, it is clear that sufficient curing has occurred so that the acrylate polymer coating maskant both (1) withstands subsequent etching of the metal substrate and (2) still remains peelable after the etching step. Maeda and Sokol are still believed to relate to the same art of radiation curable acrylate coating compositions. The Sokol substantially solvent free radiation curable acrylate coating composition having a combination of polymerizable acrylate monomers and photoinitiators is quickly cured by actinic or UV light. This gives one of ordinary skill in the art motivation to substitute the solvent free radiation curable acrylate coating composition taught by Sokol for the radiation curable acrylate coating composition of Maeda. This analysis overcomes Applicant's arguments on pages 2-4.

In response to Applicant's argument on pages 2-3 that Sokol's radiation curable acrylate coating composition is not specified as suitable for use as a peelable maskant, the fact that applicant has recognized another advantage which would flow naturally from following the suggestion of the prior art cannot be the basis for patentability when the differences would otherwise be obvious. See Ex parte Obiaya, 227 USPQ 58, 60 (Bd. Pat. App. & Inter. 1985).

In response to Applicant's argument on page 3 that Sokol does not specifically show the intention to use a radiation curable acrylate coating as a peelable maskant for etching, the test for obviousness is not whether the features of a secondary reference (Sokol) may be bodily incorporated into the structure of the primary reference (Maeda); nor is it that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art. See In re Keller, 642 F.2d 413, 208 USPQ 871 (CCPA 1981).

In response to Applicant's argument on page 3 that the Examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See In re McLaughlin, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

In response to Applicant's argument on pages 3-4 that there is no suggestion to combine the references, the Examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See In re Fine, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988)and In re Jones, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, the Sokol substantially solvent free radiation curable acrylate coating composition having a combination of polymerizable acrylate monomers and photoinitiators is quickly cured by actinic or UV light. This gives one of ordinary skill in the art motivation to substitute the Sokol solvent free radiation curable acrylate coating composition for the Maeda radiation curable acrylate coating composition, because both compositions are radiation curable acrylates (even though cured by different forms of radiation).

John Ruggles Examiner Art Unit 1756

MARK F. HUFF SUPERVISORY PATENT EXAMINER TECHNOLOGY CENTER 1700